



INSTALLATION and SERVICE MANUAL



GAS WATER HEATERS

For Installation In Recreational Vehicles

SS RV-6 and SS RV-6M

RR RV-8 and SS RV-8M

6600387

R-MARCH 1979

**FOR YOUR SAFETY
AN ODORANT HAS BEEN ADDED
TO THE GAS USED BY THIS
APPLIANCE.**

IF YOU SMELL GAS:

1. OPEN WINDOWS
2. DON'T TOUCH ELECTRICAL SWITCHES
3. EXTINGUISH ANY OPEN FLAMES
4. **IMMEDIATELY SHUT OFF GAS SUPPLY TO HEATER.**

WARNING: Drain heater if subject to freezing temperature. **DO NOT** store or use combustible materials or liquids near or adjacent to this heater. The appliance shall not be installed in any location where flammable liquids or vapors are likely to be present.

INSTALLER: AFFIX THESE INSTRUCTIONS TO OR ADJACENT TO WATER HEATER.

OWNER: RETAIN THESE INSTRUCTIONS AND WARRANTY FOR FUTURE REFERENCE.



MOR-FLO INDUSTRIES, INC.
Water Heaters

**MOR-FLO
INDUSTRIES, INC.**

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TOLL FREE: 1-800/321-9342
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APPLIANCE MG. CORP.**

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(Not California)

INSTALLATION REQUIREMENTS

This installation must conform with the requirements of the authority having jurisdiction or, in the absence of such requirements, with the National Fuel Gas Code, ANSI Z223.1-1974:

- (1) The appliance shall be disconnected from the gas supply piping system during any pressure testing of that system.
- (2) The appliance and its gas connection shall be leak tested before placing the appliance in operation.

This installation must also conform with the American National Standard for Recreational Vehicles 501C-1977. In Canada, C.S.A. Z 240.4.

INSTALLATION INSTRUCTIONS

Minimum clearance from combustible materials on sides, top, floor, and rear = 0" inches. Provide room for access to rear of heater for servicing.

MODELS SSRV6-6M — MODELS SSRV8-8M

FIGURE 1

1. Provide an opening flush with floor in outer wall of coach as shown.
2. Wall of coach should contain framing as shown in Figure 1. Maintain inside dimension.

FIGURE 2

1. Insert heater into framed opening. Place caulking sealant between heater flange and outer wall of the coach to insure a water-tight bond. Secure heater to wall using (12) No. 8x $\frac{3}{4}$ " wood screws, screwed through holes in front mounting panel of heater.
2. To install door, slip one hinge pin into slot on each side of door then insert other end of hinge pins behind spring brackets on heater frame, close door so that latch protrudes through slot in door. Turn latch 90 degrees to fasten the door.

FIGURE 3

1. Connect water lines to fittings provided, $\frac{1}{2}$ " female pipe threads.
2. Connect $\frac{3}{8}$ " gas supply piping to gas connection supplied with heater. Turn on gas and check for leaks, using a soap and water solution.

BE SURE THERE ARE NO LEAKS IN GAS SYSTEM.

3. For lighting see lighting instructions provided.

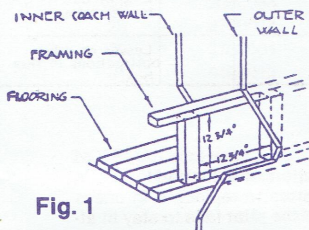


Fig. 1

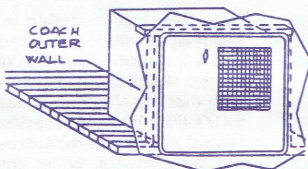


Fig. 2

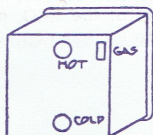
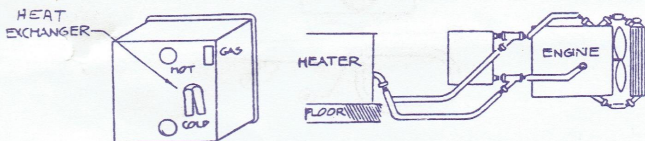


Fig. 3

FIGURES 4 and 5

INSTALLATION OF MOTOR-AID EXCHANGER (MODELS SSRV6M & 8M)

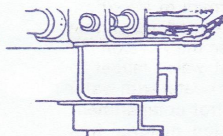
Connect heat exchanger to engine heater system using "Y" hose fittings provided, connect two 5/8" heater hoses to heater lines of engine and copper tube outlets on heat exchanger. Clamp hoses to heat exchanger tubes and "Y's" with hose clamps. Be sure water circulates with engine running.



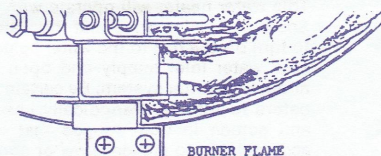
BURNER AND PILOT

All air shutters are pre-set at the factory to obtain a blue or orange-blue flame. If it is necessary to adjust your air shutter, be sure to keep this color and do not allow burner to burn yellow or sooting will occur.

In cases where sooting has occurred, there is a possibility that this condition may be corrected by making the correct air shutter adjustment. If the burner flame continues to burn yellow after adjusting the air shutter, check for an obstruction in the burner or the flue box. A stiff brush is recommended for the removal of soot deposits. If the water heater pilot and burner are both burning properly (orange blue flame) check to make sure the thermostat is shutting off clean. This can be done by turning the temperature dial all the way to the left (counter clockwise). When this is done, the gas should shut off completely.



PILOT FLAME



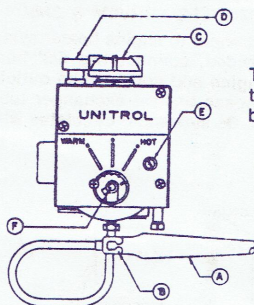
BURNER FLAME

LIGHTING INSTRUCTIONS

1. Turn gas cock to "off" position, wait five minutes.
2. Turn to pilot position, press reset button and light pilot. Hold down until pilot remains lit. Turn to "on" position.
3. Set temperature indicator knob desired temperature.
4. If pilot goes out, repeat steps 1, 2, and 3.
5. To shut down heater, turn to "off" position.

AIR SHUTTER ADJUSTMENT INSTRUCTIONS

- A. Burner Tube
- B. Air Shutter
- C. Gas Cock
- D. Reset Button
- E. Pilot Adjustment
- F. Temperature Indicator



Turn Air Shutter (B) to obtain proper blue flame.

TEMPERATURE AND PRESSURE RELIEF VALVE

The temperature and pressure relief valve is designed to open if the temperature of the water within the heater reaches 210 degrees F., or if the water pressure in the heater reaches 150 pounds. Recreational Vehicle water systems are closed systems and during the water heating cycle, the pressure build-up in the water system will reach 150 pounds. When this pressure is reached, the pressure relief valve will open and water will drip from the valve. This dripping will continue until the pressure is reduced to below 150 pounds and the valve closes. This condition is normal and does not indicate a defective relief valve.

MAINTENANCE

This water heater will operate with a minimum of attention. Should occasion arise that the water be drained, be certain to turn off the gas to the water heater, close the valve on the cold water inlet supply and open the hot water faucet to allow air to enter system. Be certain to refill heater with water before re-lighting. Periodically check control compartment and screen in door to see that no foreign material has accumulated to prevent flow of combustion and ventilating air. Periodically check burner and pilot flames visually. Compare with sketch under the burner adjustment section.

DO NOT STORE COMBUSTIBLE MATERIAL OR LIQUID NEAR OR ADJACENT TO THIS WATER HEATER.

MAINTENANCE OF "MOTOR-AID" HEAT EXCHANGER ON MODELS SSRV6M and SSRV8M

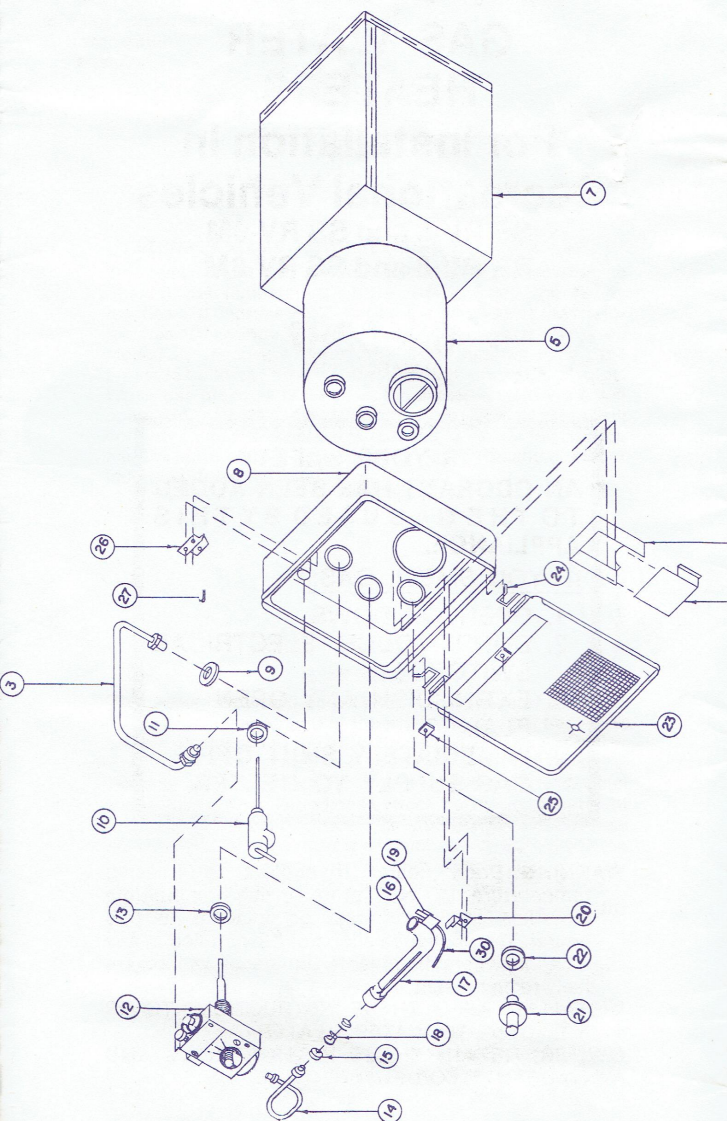
The Motor-Aid Heat Exchanger is designed to operate safely and efficiently for indefinite periods of time and should require no maintenance. Be sure to check your heater hoses for cracks after the first year of operation, since a cracked or broken hose could cause a great inconvenience on an outing.

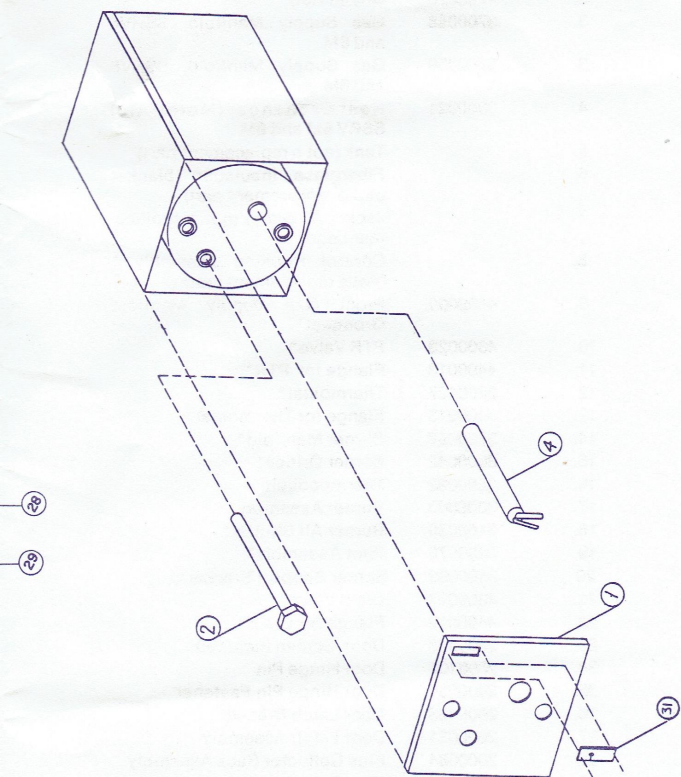
WATER HEATER SERVICE ANALYSIS CHART

The thermostat and thermocouple on SSRV6(M), SSRV8(M) water heaters are standard items usually available in plumbing supply stores. The following chart can be used as a guide that will enable you to solve most of the problems that the customer could have with his water heater.

Sooting	Pilot will not Come on	No hot water, pilot will not stay on.	Not enough hot water.	Water too hot.	Possible Cause
	X				Malfunction of the bottled gas regulator
	X	X			Lint in pilot air opening.
		X			Loose or inoperative thermocouple
	X	X			Clogged pilot orifice
		X			Improper pilot flame
			X		Thermostat setting too low
			X		Main burner orifice too small or clogged
				X	Thermostat setting too high.
				X	Pilot flame adjust- ment too high
X					Thermostat not shutting off completely
X					Yellow flame improper air shutter adjustment
X					Yellow flame due to improper setting
X					Lint or dirt in pilot or pilot orifice
X					Lint or dirt in burner tube
X					Leaves or other obstructions in flue box.

Since the cost including installation of a thermocouple is relatively small, it is a good practice to replace it in cases where the pilot does not stay lit. If the pilot fails to stay lit after the thermocouple has been replaced, the chances are high that the electro magnet in the control, or in the built in E.C.O. (Energy Cutoff Device) is defective. In such cases, the easiest solution is to replace the control. If desired, the control components, either the magnet or the ECO, may be checked before replacing the control.





REF. NO.	PART NO.	PART NAME
1.	2100045	Jacket Back, SSRV 6 and 8
1.	2100044	Jacket Back, SSRV 6M and 8M
2.	4700070	Anode Rod*
3.	3700058	Gas Supply Manifold, SSRV6 and 6M
3.	3700059	Gas Supply Manifold, SSRV8 and 8M
4.	3000021	Heat Exchanger (Motor-Aid) SSRV 6M and 8M
5.		Tank (not a replacement part)
6.		Fiberglass insulation blanket (not a replacement part)
7.		Jacket (2 piece) (not a replacement part)
8.		Control Housing Assembly * (not a replacement part)
9.	4400000	Front Gas Supply Manifold Grommet*
10.	4300023	PTR Valve*
11.	4400013	Flange for PTR*
12.	3200127	Thermostat*
13.	4400013	Flange for Thermostat*
14.	3700057	Burner Manifold*
15.	3600042	Burner Orifice*
16.	3200082	Thermocouple*
17.	3000003	Burner Assembly*
18.	3100039	Burner Air Shutter*
19.	3200070	Pilot Assembly*
20.	3100039	Burner Support Bracket*
21.	4300007	Drain Valve*
22.	4400019	Flange for Drain*
23.	2000023	Door, Screen included
24.	2600107	Door Hinge Pin
25.	2600030	Door Hinge Pin Fastener
26.	2600033	Door Latch Bracket
27.	2600031	Door Latch Assembly
28.	2000084	Flue Collector Back Assembly
29.	2700074	Flue Collector Front
30.	3700001	Pilot Tube w/fittings
31.	4400015	Rear Inlet Gas Supply Manifold Grommet

NOTE: All screws in assembly are standard hardware items. When ordering parts, be certain to specify the EXACT Model Number of your Heater, complete Serial Number, Reference Number and the Name of the Part from this list. All parts not covered by the warranty will be shipped C.O.D. (NOTE: warranty covers mechanical parts for a period of one year only). Prices available from the factory or your dealer.

* = Standard Part, All Models.